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Revised 01/24/05

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RAW SEQUENCE LISTING

PATENT APPLICATION: UB/10/547,532

DATE: 09/13/2005

TIMB: 13:24:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

pr 1-10

Open Not Comply onected Diskette Needle

3 <110 > APPLICANT: SHINTANI, ET AL.

5 <120> TITLE OF INVENTION: MEDICINAL USE OF MIP-3a INHIBITOR AND METHOD OF SCREENING

America and humber are completely mesaligned

## BRAIN/NERVE

CELL PROTECTIVE AGENT

8 <130> FILE REFERENCE: 20039.1USWO

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/547,532

C--> 11 <141> CURRENT FILING DATE: 2005-08-31

13 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/002774

14 <151> PRIOR FILING DATE: 2004-03-04

16 <150> PRIOR APPLICATION NUMBER: JP 2003-056885

17 <151> PRIOR FILING DATE: 2003-03-04

19 <150> PRIOR APPLICATION NUMBER: JP 2003-106247

20 <151> PRIOR FILING DATE: 2003-04-10

22 <160> NUMBER OF SEQ ID NOS: 21

24 <170> SOFTWARE: PatentIn version 3.1

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27 <211> LENGTH: 288

28 <212> TYPE: DNA

29 <213> ORGANISM: Homo sapiens

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34 <223> OTHER INFORMATION:

36 <220> FEATURE:

37 <221> NAME/KEY: sig\_peptide

38 <222> LOCATION: (1)..(78)

39 <223> OTHER INFORMATION:

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42 <221> NAME/KEY: mat peptide

43 <222> LOCATION: (79)..()

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W--> 49 -20 -15

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E--> 81 ala ser asn Phe asp cys

-10

tgt ctt gga tac aca gac cgt att ctt cat cct aaa ttt att gtg ggc

₩--> 53 144Cys Leu Gly Tyr Thr Asp Arg Ile Leu His Pro Lys Phe Ile Val Gly

48Met Cys B--> 48 dys thr Lys ser Leu Leu Leu ala dla Leu met ser dal Leu -25 cta ctc cac ctc tgc ggc gaa tca

96Leu Leu His Leu Cys Gly Glu Ser Glu Ala -5

Amino ando go directly under their Continuo

ttc aca cgg cag ctg

Best Available Cop 9/13/05

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RAW SEQUENCE LISTING DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

spre en Output Set: N:\CRF4\09132005\J547532.raw

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W--> 55 gcc aat gaa ggc tgt gac atc aat gct atc atc
                                                       192Phe Thr Arg Gln Leu Ala Asn
E--> 56 glu gly cys asp Ile asn ala Ile Ile
                                                          25
                              ttt cac aca aag aaa aag ttg tct gtg tgc gca aat cca aaa
W--> 57 35
                    240Phe His Thr Lys Lys Leu Ser Val Cys Ala Asn Pro Lys Gln Thr
W--> 58 cag act
W--> 59
          40
                               45
                                                  50
W--> 60 and tat att gtg cgt ctc ctc agt and and gtc ang anc atg
                                                                   288Trp Val Lys Tyr
E--> 61 Ile val arg Leu Leu ser Lys Lys val Lys asn met 55
B--> 62 65
                           70
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     90 <222> LOCATION: (1)..(288)
     91 <223> OTHER INFORMATION:
     93 <220> FEATURE:
     94 <221> NAME/KEY: sig peptide
     95 <222> LOCATION: (1)..(75)
     96 <223> OTHER INFORMATION:
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W--> 103 <400> 3
W--> 104 atg gcc tgc aag cat ctg ccc ttc ctg gct ttg gcg ggg gta ctg ctg
                                                                             48Met Ala
E--> 105 cys Lys his Leu Pro Phe Leu ala Leu ala gly val Leu Leu
E--> 106 -20
                            -15
W--> 107 get tac etc tgc age cag tea gaa gea age aac ttt gae tge tge
W--> 108 Leu Cys Ser Gln Ser Glu Ala Ala Ser Asn Phe Asp Cys Cys
W--> 109 -5
                       -1 1
                                                               ctc acg tac aca aag aac
W--> 110 gtg tat cat cat gcg aga aat ttt gtg ggt
                                                    144Leu Thr Tyr Thr Lys Asn Val Tyr
E--> 111 his his ala arg asn Phe val gly
W--> 112 20
                               tte aca aca cag atg gee gae gaa get tgt gae att aat get
W--> 113 atc atc
                     192Phe Thr Thr Gln Met Ala Asp Glu Ala Cys Asp Ile Asn Ala Ile Ile
                          30
W--> 114 25
                                               35
                                                                          ttt cac ctg
W--> 115 aag tog aaa aga too gtg tgo got gac coa aag cag atc
                                                                240Phe His Leu Lys Ser
E--> 116 Lys arg ser val cys ala asp Pro Lys gin Ile
                                                           40
                          . 55
W--> 117 50
                                     tgg gtg aaa agg att ttg cac ctc ctc agc cta aga
W--> 118 acc aag aag atg
                            288Trp Val Lys Arg Ile Leu His Leu Leu Ser Leu Arg Thr Lys
E--> 119 Lys met
                                       60
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143 <213> ORGANISM: Mus musculus

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146 <221> NAME/KEY: CDS

147 <222> LOCATION: (1)..(291)

148 <223> OTHER INFORMATION:

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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

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                                                                             48Met Ala
E--> 162 cys gly gly Lys arg Leu Leu Phe Leu ala Leu ala trp val
W--> 163 -20
                        -15
                                                   ctg ctg gct cac ctc tgc agc cag gca
W--> 164 gaa gca gca agc aac tac gac
                                        96Leu Leu Ala His Leu Cys Ser Gln Ala Glu Ala
E--> 165 ala ser asn tyr asp
                                       -10
W--> 166 5 tgt tgc ctc tcg tac ata cag acg cct ctt cct tcc aga gct att gtg
W--> 167 144Cys Cys Leu Ser Tyr Ile Gln Thr Pro Leu Pro Ser Arg Ala Ile Val
W--> 168 10
                            15
                                              20
                                                              ggt tto aca aga cag atg
W--> 169 gcc gat gaa gct tgt gac att aat gct atc
                                                   192Gly Phe Thr Arg Gln Met Ala Asp
E--> 170 glu ala cys asp Ile asn ala Ile
                                                           25
W--> 171 35
                           atc ttt cac acg aag aaa aga aaa tct gtg tgc gct gat cca aag
W--> 172 cag
                 240Ile Phe His Thr Lys Lys Arg Lys Ser Val Cys Ala Asp Pro Lys Gln
W--> 173 40
                           45
                                               50
                                                                      aac tgg gtg aaa
                                                            288Asn Trp Val Lys Arg Ala
W--> 174 agg gct gtg aac ctc ctc agc cta aga gtc aag aag
E--> 175 val asn Leu Leu ser Leu arg val Lys Lys
                                                           55
W--> 176 65
B--> 177 291met
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     207 <222> LOCATION: (1)..(1122)
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E--> 212 gly glu ser met asn Phe ser asp val Phe asp ser ser glu
                            10
                                              15
                                                               gat tat ttt gtg tca gtc
W--> 214 aat act tca tat tac tca gtt gat tct gag
                                                    96Asp Tyr Phe Val Ser Val Asn Thr
E--> 215 ser tyr tyr ser val asp ser glu
W--> 216 30
                            atg tta ctg tgc tcc ttg cag gag gtc agg cag ttc tcc agg cta
W--> 217 ttt
                 144Met Leu Leu Cys Ser Leu Gln Glu Val Arg Gln Phe Ser Arg Leu Phe
W--> 218 35
                            40
                                               45
                                                                       gta ccg att gcc
W--> 219 tac tcc ttg atc tgt gtc ttt ggc ctc ctg ggg aat
                                                            192Val Pro Ile Ala Tyr Ser
E--> 220 Leu Ile cys val Phe gly Leu Leu gly asn
                                                           50
W--> 221 60
                                   att ctg gtg gtg atc acc ttt gct ttt tat aag aag gcc
W--> 222 agg tct atg
                         240Ile Leu Val Val Ile Thr Phe Ala Phe Tyr Lys Lys Ala Arg Ser
E--> 223 met
                   65
W--> 224 aca gac gtc tat ctc ttg aac atg gcc att gca gac atc ctc ttt gtt
                                                                           288Thr Asp
```

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DATE: 09/13/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\09132005\J547532.raw

W>																	1	m	مرب	,	
M>	225	Val	Tyr	Leu	Leu	Asn	Met	Ala	Ile	Ala	Asp	Ile	Leu	Phe	Val	_		•			
																					tgg
											gtt		33	6Leu			Pro	Phe	Trp		Val
				ala	thr			trp							100					105	
W>							ttc	agc	aat	gcc	acg	tgc	aag	ttg	cta	aaa	ggc	atc	tat	gcc	atc.
W>	230	aac	٠.	38	4Phe	Ser	Asn	. Ala	Thr	Cys	Lys	Leu	Leu	Lys	Gly	Ile	Tyr	Ala	Ile	Asn	
W>	231	115					120			·		125						ttt	aac	tgc	999
W>	232	atg	ctg	ctc	ctg	act	tgc	att	agc	atg	gac	cgg	tac		43	2Phe	Asn	Сув	Gly	Met	ggg Leu
E>	233	Leu	Leu	thr	сув	Ile	ser	met	авр	arg	tyr				130	•				135	
-										3		3		3~3		3			~33		-5-
W>							OTTE	Ala	ITe		Gln	Ala	Thr	Lys			Arg	Leu	Arg		_
E>					145					150					155		-4			160	
W>	237	cta	ccg	cgc	agc	888	atc	acc	tge	333	gtt	gtg	tgg	999	ctg	tca	gtc	•	52	gren	Pro
W>				гув	TIE	TIE		Leu	vaı	Val	rrp	_		ser	Val						
							170		,			175		CT7 4	71.				-	tca	
W> E>			_							açc	Caa		571	OTTE	180	ser	ser	Ser	Int	185	
W>				9	Lyo	-yr			•	ata	tat	<i>~</i> 22	~~~	224		020	201	ata	+	gag	
W>				62	4G] v	Ser															
W>					,		200		<b>-</b> 70			205	-1-	42		•	501			aag	
W>				tta	aaa	ctt		cta	ctc	ttt	aat		ttt		67	2Ara	Tro				
B>															210			-2-		215	
W>													ttc	atq		ttt	tat	tac	acq	ttc	att
W>	248	gtc	aaa	acc		720	lle	Pro	Leu	Met	Phe	Met	Ile	Phe	Сув	Tyr	Thr	Phe	Ile	Val	Lys
B>					225					230					235	•				240	-
W>	250	ttg	gtg	caa	gct	cag	aat	tct	aaa	agg	cac	aaa	gcc	atc	cgt	gta	atc		76	3Leu	Val
W>																					•
W>							250													ctt	
W>	253	ttt	ctg	gct	tgt	cag	att	cct	cat	aac	atg		816	SIle	Ala	Val	Val	Leu	Val	Phe	Leu
B>				gln	Ile	Pro	his	asn	met						260					265	
M>																				cga	tcc
W>	256	tgc		864	ival	Leu	Leu	Val	Thr	Ala	Ala	Asn	Leu	Gly	Lys	Met	Asn	Arg	Ser	Сув	
W>	257	275					280					285						cag	agc	gaa	aag
W> W> B>	258	cta	att	ggc	tat	acg	aaa	act	gtc	aca	gaa	gtc	ctg		912	2Gln	Ser	Glu	Lys	Leu	Ile
R>	259	grå	tyr	cnr	Lys	thr	AST	thr	glu	val	Leu				290				•	295	
W>	260	300				0.00		<b>-</b> 1	gct	EEC.	ctg	Cac	tgc	tgc	ctg	aac	cct	gtg	ctc	tac	gct
			acc		305		WIG	PAE	Leu		Сув	Cys	rea	ASI		AST	rea	TYE	Ala		116
B~->										310					315				1000	320	
W>																rgg	LgL		1006	GIH	TAR
W>			ALY	ADII	-7-	FMG	330	nyo	116	neu						~+~				tac	226
			tca	aac	tta	tcc		~~~	~~~	200	tac	333	1056	V=1	3	3-2	Luc	Tur	Lve	Car	goz.
W>	267	alv	Phe	59°	CVR	ala	alv	ara	tvr aaa	~44	Lac		-000	- T CI A	340	arr A	LYS	-11	-1 Å G	345	MC#
₩>					-, 0			_	-	att	tet	caa	cao	acc		αaα		aca	oa t	aac	gac
W>				1104	Ser	Glu	Asp	Ile	Ser	Ara	Glo	Thr	Ser	Glu	Thr	a I A	Ago	Aan	Aan	Ann	3-4
W>							360			3		365								tcc	
W>			ato				· - <del>-</del>								1122	Ala			_	Thr	
E>																					
			> SE	Q ID	NO:	9														•	

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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

330 <211> LENGTH: 1101

Output Set: N:\CRF4\09132005\J547532.raw

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RAW SEQUENCE LISTING DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

```
W--> 381 245
                                              255
                                                             get tgt cag atc cet cac
w--> 382 aac atg gtc ctc ctc gtg act gcg gtc aac 816Ala Cys Gln Ile Pro His Asn Met
E--> 383 val Leu Leu val thr ala val asn
                                                         260
                         acg ggc aaa gtg ggc cgg agc tgc agc acc gag aaa gtc ctc gcc
W--> 384 270
W--> 385 tac
                 864Thr Gly Lys Val Gly Arg Ser Cys Ser Thr Glu Lys Val Leu Ala Tyr
W--> 386 275
                           280
                                           285
                                                                  acc agg aac gtg
W--> 387 gcc gag gtc ctg gct ttc ctg cat tgc tgc ctc aac
                                                          912Thr Arg Asn Val Ala Glu
E--> 388 val Leu ala Phe Leu his cys cys Leu asn
                                                          290
W--> 389 300 ccc gtg ttg tat gcg ttt att gga cag aaa ttc aga aac
W--> 390 tac ttc atg 960Pro Val Leu Tyr Ala Phe Ile Gly Gln Lys Phe Arg Asn Tyr Phe
E--> 391 met 305
                                      310
                                                          315
.1008Lys Ile
W--> 393 Met Lys Asp Val Trp Cys Met Arg Arg Lys Asn Lys Met Pro
                                                            ggc ttc ctc tgt gcc cgg
W--> 394 325
                           330
                                        335
W--> 395 gtt tac tcg gaa agc tac atc tcc agg cag 1056Gly Phe Leu Cys Ala Arg Val Tyr
E--> 396 ser glu ser tyr Ile ser arg gln
                                                         340
                      acc agt gag acc gtc gaa aat gat aat gca tcg tcc ttt acc atg
W--> 398 1101Thr Ser Glu Thr Val Glu Asn Asp Asn Ala Ser Ser Phe Thr Met
E--> 399 355
                           360
    480 <210> SEQ ID NO: 13
                                                         Lotale are at right
maging each line
     481 <211> LENGTH: 1502
     482 <212> TYPE: DNA
     483 <213> ORGANISM: Rattus norvegicus (kidney) -
     485 <220> FEATURE:
     486 <221> NAME/KEY: CDS
     487 <222> LOCATION: (343)..(1443)
     488 <223> OTHER INFORMATION:
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W--> 493 1200cacctgcag tittgaagtea teaetiticaa teeeectgtg actagggcca gggtetteae
W--> 494 180a/cctgcgaga ggaagcaaag atctaagcaa tctgaatttt aagagagaaa ctgcagctgt
W--> 495 240cggtttgtgg geeggaacat tattggactg gageetggac aagcactaag gegggggtac
E--> 496 300ctggccagcc cacttcggag ctcagcgttt ccttgggaaa cg atg aat ttc acc
                                                                             354
B--> 497 met asn Phe thr
                                                                             1
W---> 498 gag gec aac tac gga atg gaa gat tat act ggc tca gat tac tct atg
                                                                          402Glu Ala
E--> 499 asn tyr gly met glu asp tyr thr gly ser asp tyr ser met 5
                                          20
W--> 500 10
                           15
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                                             450Phe Pro Glu Thr Glu Pro Cys Ser Leu
W--> 501 tct ctg caa gag gtc aga gac ttc acc
E--> 502 gln glu val arg asp Phe thr
W--> 503 35
                      aag gtg ttc gtg cca atc gcc tac tcc tta atc tgt gtc ttt ggc etc
W--> 504 498Lys Val Phe Val Pro IIe Ala Tyr Ser Leu IIe Cys Val Phe Gly Leu
W--> 505 40
                        45 50
                                                                 ctt ggc aat att atg
W--> 506 gtg gtg ata acc ttt gcc ttc tac aag aaa gcc
                                                      546Leu Gly Asn Ile Met Val Val
E--> 507 Ile thr Phe ala Phe tyr. Lys Lys ala
W--> 508 65
                              agg tee atg act gae gte tac eta ttg aac atg gee atc aca
W---> 509 gac ata
                    594Arg Ser Met Thr Asp Val Tyr Leu Leu Asn Met Ala Ile Thr Asp Ile
W--> 510 70
                                              86
                                                                        ctc ttt gtc
                                                             642Leu Phe Val Leu Thr
W--> 511 ctc acc cta cca ttc tgg gca gtt act cat gcc act gac
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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

som

	-40			<b>-</b> 1.		_ • _	•			-7-	44-									90	
E>			PTO	PDe	crp												-4-	4-4			
₩>.																					atg
W>					CAC		07	VINE	rrb	105	Phe	GTÅ	WRIT	IIII	110	САВ	тАв	Tân		115	GIY
E>									-4-			-4-									17- 1
W>																	acg		/30	)MIG	120
E>			Pne	asn	сув	gry	130		ren	neu	ara	_					200	at a			
₩>									70	C8	1					gcc					
W>				_			cgc					IÄL	116	WTG			GIII	MIG	1111	145	
B>										135					140		ندهه		02	-	
B>	241	tee	aga	aca	ctg	acg	cac	agc	Tla	gcc	Tou	ege -	erg	acg	grg	rgg	LLC		150	IDGI	MIG
M>			Ten	CHI	UTR	ser	160	Val	116	сув	nea	CHI	vai							200	CCC
W>	524	733	++-	++0	++-	224	100	<b>400</b>	tan		aa-	257= 1	Cor	Tla	71-	TIA	Gor	gar	Bro	The	Pha
B>													Per	116	170		567	561	110	175	
M>					_	_	_					tac	asa.	act			224	cto	atc		
W>					_	_	_		_	_	_	_	-		_		_		3	9	
W>			ayo .	ueu ·	J	GIY .	190	roħ	<b>,</b>	clo.	JIU .		<b>.</b>						aca		aaa
M>	520	200	ata	aac	eta	aaa		mam	cta	ctc	+++		97	RGT11	Pro						
B>	530	alv	met	age.	Leu	22"	Leu	Len	Phe		-		•		200				-,-	205	
W>											cct	tta	cta	ttt			ttc	tat	tac		ttc
W>																					
W>					,		220					225				-4-	-4-				ttg
W>				acc	cag	aat		вас	agg	cac	aga		atc		107	4Ile	Lys				
B>															230		•			235	
W>			<b>-</b>			•	_						gct	gtg	gtt	ctc	gtg	ttc	ctg	gat	tgt
W>			atc	cct		112	2Arg	Val	Val	Ile	Ala	Val	Val	Leu	Val	Phe	Leu	Ala	Cys	Gln	Ile
B>					245		_			250			•		255					260	
₩>	539	cac	aac	atg	gtc	ctc	ctc	gtg	act	gca	gcc	aac	acg	ggc	aaa	atg	ggc		1170	His	Asn
W>	540	Met	Val	Leu	Leu	Val	Thr	Ala	Ala	Asn	Thr	Gly	Lys	Met	Gly						
W>							270					275								gcc	
W>	542	888	gcc	ctc	gcc	tac	gcc	agg	aat	gtg	gct		1218	BArg	Ser	Cys	Ser	Ala	Glu	Lys	Ala
E>	543	Leu	ala	tyr	ala	arg	asn	val	ala						280					285	•
M>																ctc					tat
W>	545	gcc		1266	6Glu	Val	Leu	Ala	Phe	Leu	His	Cys	Сув	Leu	Asn	Pro	Val	Leu	Tyr	Ala	
W>							300					305					_			gga	~
W>												aag	gat			4Phe	Ile	Gly	Gln		Phe
E>		_				met	Lys	Ile		_	_	_			310		,			315	
W>								_	gtg	tgg	tgt	atg	agg	agg	aag	agc	aag	gtg	CCE	acc	EEC
W>			-	-		1362	Svat	Trp	Cys		Arg	Arg	Lys	Ser		Val	Pro	TAT	Pne		сув
E>	551	ala		_	325					330					335					340	h
W>																	gta		141(	Arg	val
W>		-	ser	GIU	ser	ıyr		ber	Arg	GIN	Inr		GIU	TOT			+				<b>.</b>
W>		-			_4-	4	350					355	1400			gaa		-		_	_
W>				acc	arg	caa	CAC	ladad	ica (	aaaç	cago	id .	1403	TT.			YEI	WIS	ser	365	rne
B>						. <b></b> .									360				1502		
E>		_	-	-	•		احترون	ic e e é	JCEAI	r esc	acgi	-Aa							4304		
		<210		_			•														
		<211				, v 7													•		
	014	<212	> 11	.FE:	DIMM																

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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: U8/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

```
615 <213> ORGANISM: Rattus norvegicus (liver)
     617 <220> FEATURE:
     618 <221> NAME/KEY: CDS
     619 <222> LOCATION: (150)..(1250)
     620 <223> OTHER INFORMATION:
W--> 622 <400> 15
E--> 623 gcatctcact acceptctct caatgagcac egetggttgt gcctgtcaac agaatagtee
W--> 624 60tctcacactt aggactggag cctggacaag cactaaggcg ggggtacctg gccagcccac
B--> 625 120tteggagete agegttteet tgggaaaeg atg aat tte ace gag gee aac tae
E--> 626 met asn Phe thr glu ala asn tyr
                                gga atg gaa gat tat act ggc tca gat tac tct atg ttt cca
                     221Gly Met Glu Asp Tyr Thr Gly Ser Asp Tyr Ser Met Phe Pro Glu Thr
W--> 628 gag acc
W--> 629 10
                                                20
                                                                           gag cca tgc
W--> 630 tot otg caa gag gto aga gac tto acc aag gtg tto gtg
                                                                 269Glu Pro Cys Ser Leu
                                                           25
E--> 631 gln glu val arg asp Phe thr Lys val Phe val
                           40 cca atc gcc tac tcc tta atc tgt gtc ttt ggc ctc
W--> 632 35
                           317Pro Ile Ala Tyr Ser Leu Ile Cys Val Phe Gly Leu Leu Gly
W--> 633 ctt ggc aat att
                                                            50
B--> 634 asn Ile
                                        45
W--> 635 atg gtg gtg ata acc ttt gcc ttc tac aag aaa gcc agg tcc atg act
                                                                             365Met Val
E--> 636 val Ile thr Phe ala Phe tyr Lys Lys ala arg ser met thr
                                               gac gtc tac cta ttg aac atg gcc atc aca
W--> 637 65
                            70
W--> 638 gac ata ctc ttt gtc ctc
                                     413Asp Val Tyr Leu Leu Asn Met Ala Ile Thr Asp Ile
E--> 639 Leu Phe val Leu
                                        75
                                                            80
W--> 640 acc cta cca ttc-tgg gca gtt act cat gcc act gac act tgg atc ttt
                                                                             461Thr Leu
E--> 641 Pro Phe trp ala val thr his ala thr asp thr trp Ile Phe
W--> 642 95
                           100
                                                        ggc aac acg atg tgt aaa ctg atg
                                             509Gly Asn Thr Met Cys Lys Leu Met Lys Gly
W--> 643 aaa ggc acg tat gcg gtc aac ttt
E--> 644 thr tyr ala val asn Phe 105
                                                            110
W--> 645 120 aac tgt ggg atg ctg ctc ctg gcc tgt atc agc atg gac cgg tac att
W--> 646 557Asn Cys Gly Met Leu Leu Leu Ala Cys Ile Ser Met Asp Arg Tyr Ile
W--> 647 125
                            130
                                               135
                                                               gcc atc gtc cag gcg acc
W--> 648 ass tet tte egg gta ege tee aga aca etg
                                                     605Ala Ile Val Gln Ala Thr Lys Ser
E--> 649 Phe arg val arg ser arg thr Leu
                                                            140
                            acg cac agt aag gtc atc tgt ctg acg gtg tgg ttc gtt tcc atc
W--> 650 150
W--> 651 atc
                 653Thr His Ser Lys Val Ile Cys Leu Thr Val Trp Phe Val Ser Ile Ile
                            160
                                                165
W--> 653 aca tto tto tto aac aag caa tac aag ctg cag ggc
                                                            70111e Ser Ser Pro Thr Phe
B--> 654 Phe Phe asn Lys gln tyr Lys Leu gln gly
                                                            170
W--> 655 180
                                    cgt gat gtc tgc gag cct cag tac aag ctc gtc tcg gag
W--> 656 ccc atc acg
                         749Arg Asp Val Cys Glu Pro Gln Tyr Lys Leu Val Ser Glu Pro Ile
                    185
E--> 657 thr
                                        190
                                                            195
W--> 658 tgg aaa ctg ctg ggc atg gga ctc gag ctg ctc ttt ggc ttc ttc atc
                                                                             797Trp Lys
W--> 659 Leu Leu Gly Met Gly Leu Glu Leu Leu Phe Gly Phe Phe Ile
                            210
                                             215
                                                                cct ttg ctg ttt atg gtg
W--> 661 ttc tgt tac ctg ttc atc atc aag acc ttg
                                                     845Pro Leu Leu Phe Met Val Phe Cys
B--> 662 tyr Leu Phe Ile Ile Lys thr Leu
                            gtg cag gcc cag aat tcc aag agg cac aga gcc atc cga gtc gtg
W--> 663 230
W--> 664 att
                 893Val Gln Ala Gln Asn Ser Lys Arg His Arg Ala Ile Arg Val Val Ile
W--> 665 235
                                                                        gct gtg gtt ctc
```

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RAW SEQUENCE LISTING DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\09132005\J547532.raw

W>	666	gtg	ttc	ctg	gct	tgt	cag	atc	cct	cac	aac	atg	gtc		94:	lAla	Val	Val	Leu	Val	Phe
E>																				255	
W>	668	260	•						ctc	ctc	gtg	act	gca	gcc	aac	acg	ggc	aaa	atg	ggc	cgc
W>	669	agc	tgc	agc		989	Leu	Leu	Val	Thr	Ala	Ala	Asn	Thr	Gly	Lys	Met	Gly	Arg	Ser	Сув
E>	670	ser			265			•		270					275					280	
M>	671	gcc	gag	aaa	gcc	ctc	gcc	tac	gcc	agg	aat	gtg	gct	gag	gtc	ctg	gct		1037	7Ala	Glu
W>	672	Lys	Ala	Leu	Ala	Tyr	Ala	Arg	Asn	Val	Ala	Glu	Val	Leu	Ala						
W>																ttc					
M>	674	aac	ccc	gtg	ttg	tat	gcc	ttc	att	gga	cag		1085	Phe	Leu	Ris	Сув	Cys	Leu	Asn	Pro
· E>	675	val	Leu	tyr	ala	Phe	Ile	gly	gln						300					305	
W>	676	310					aaa	ttc	aga	agc	tac	ttc	atg	aag	atc	atg	aag	gat	gtg	tgg	tgt
M>	677	atg		1133	3Lys	Phe	Arg	Ser	Tyr	Phe	Met	Lys	Ile	Met	Lys	Asp	Val	Trp	Cys	Met	
W>	678	315					320					325						agg	agg	aag	agc
M>	679	aag	gtg	cct	acc	ttc	ttc	tgt	gcc	cgg	gtt	tac	tca	-	118	lArg	Arg	Lys	Ser	Lys	Val
B>	680	Pro	thr	Phe	Phe	сув	ala	arg	val	tyr	ser				330					335	
W>																					
W>											Ser	Arg	GIn	Thr	Ser	Glu	Thr	Val	Glu		Asp
E>															355					360	
W>	684	gca	tcg	tcc	ttt	acc	atg	taa	cac	gagag	gca c	aaag	cago	a to	gece	gaaa	1		1280	Ala	Ser
W>	685	Ser	Phe	Thr	Met														•		
W>	686	365				•										gcct	ttgt	tga a	act	igota	at
E>	687	tacatgtga								1309											

USPTO 5/1/2006 2:11 PM PAGE 12/018 Fax Server TO: Antionette Peters COMPANY:

10/547,532 10

<210>

<211> 20

<212> DNA

<213> Artificial

<220>

<221> misc\_feature

<223> Oligonucleotide designed to act as primer for amplifying fragment

of rat MIP-3%) gene transcript.

do NOT use scientific symboli or foreign accent
marke

They consol be
propor

They consol be
propor (They cannot be processed by CRF software.)

The types of eners shown exist throughout the Sequence Listing. Please check subsequent sequences for similar entus.

.USPTO 5/1/2006 2:11 PM PAGE 13/018 Fax Server TO:Antionette Peters COMPANY:

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

## Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

```
Seq#:1; Line(s) 47,48,49,50,51,52,53,54,55,56,57,59,60,61
Seq#:3; Line(s) 104,105,107,108,109,110,111,112,113,114,115,116,117,118,119
Seq#:5, Line(s) 161,162,163,164,165,166,167,168,169,170,171,172,173,174,175
Seq#:5; Line(s) 176,177
Seq#:7; Line(s) 211,212,213,214,215,216,217,218,219,220,221,222,223,224,225
Seq#:7; Line(s) 226,227,228,229,230,231,232,233,234,235,236,237,238,239,240
Seq#:7; Line(s) 241,242,243,244,245,246,247,248,249,250,251,252,253,254,255
Seq#:7; Line(s) 256,257,258,259,260,261,262,263,264,265,266,267,268,269,270
Seq#:7; Line(s) 271
Seq#:9, Line(s) 340,341,342,343,344,345,346,347,348,349,350,351,352,353,354
Seq#:9; Line(s) 355,356,357,358,359,360,361,362,363,364,365,366,367,368,369
Seq#:9; Line(s) 370,371,372,373,374,375,376,377,378,379,380,381,382,383,384
Seq#:9; Line(s) 385,386,387,388,389,390,391,392,393,394,395,396,397,398
Seq#:13; Line(s) 496,497,498,499,500,501,502,503,504,505,506,507,508,509
Seq#:13; Line(s) 510,511,512,513,514,515,516,517,518,519,520,521,522,523
Seq#:13; Line(s) 524,525,526,527,528,529,530,531,532,533,534,535,536,537
Seq#:13; Line(s) 538,539,540,541,542,543,544,545,546,547,548,549,550,551
Seq#:13; Line(s) 552,553,554,555,556
Seq#:15; Line(s) 625,626,627,628,629,630,631,632,633,634,635,636,637,638
Seq#:15; Line(s) 639,640,641,642,643,644,645,646,647,648,649,650,651,652
Seq#:15; Line(s) 653,654,655,656,657,658,659,660,661,662,663,664,665,666
Seq#:15; Line(s) 667,668,669,670,671,672,673,674,675,676,677,678,679,680
Seq#:15; Line(s) 681,682,683,684,685
```

## Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seg#:11,12,16,17,18,19,20,21

VERIFICATION SUMMARY DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
 L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:41 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:34
L:46 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:39
L:46 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:44
 L:47 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:48 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 L:48 M:254 E: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:1
 L:48 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
 L:48 M:112 C: (48) String data converted to lower case,
L:49 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:10
L:50 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:50 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:25
L:51 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:254 Repeated in SeqNo=1
L:51 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:5
M:112 Repeated in SeqNo=1
L:52 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:53 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:53 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:54 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:54 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:8
L:55 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:55 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:12
M:341 Repeated in SeqNo=1
L:56 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:56 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:13
L:57 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:58 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:58 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3
L:59 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:59 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:60 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:61 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:61 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:62 M:252 E: No. of Seq. differs, <211> LENGTH:Input:288 Found:127 SEQ:1
L:98 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:91
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:96
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:101
L:104 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:105 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:105 M:254 E: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:3
L:105 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
L:105 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SegNo=3
L:107 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/547,532

DATE: 09/13/2005

TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:108 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
 L:109 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:109 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:10
L:110 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:110 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:22
L:111 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:111 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
M:112 Repeated in SeqNo=3
L:112 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:113 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:113 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3
L:114 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:114 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
L:115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:115 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
M:341 Repeated in SeqNo=3
L:116 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:116 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID REYS:12
L:117 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:118 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:118 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:119 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:119 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2
L:119 M:252 B: No. of Seq. differs, <211> LENGTH:Input:288 Found:106 SEQ:3
L:155 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:148
L:160 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:153
L:160 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:158
L:161 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:162 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:162 M:254 B: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:5
L:162 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
L:162 M:112 C: (48) String data converted to lower case,
L:163 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:164 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:164 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:8
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:25
L:165 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
M:254 Repeated in SeqNo=5
L:165 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:112 Repeated in SeqNo=5
L:166 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:167 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5-
L:167 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:168 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:168 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:169 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:169 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
M:341 Repeated in SeqNo=5
```

 VERIFICATION SUMMARY
 DATE: 09/13/2005

 PATENT APPLICATION: US/10/547,532
 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:170 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:170 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
 L:171 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
 L:172 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:172 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
 L:173 M:336 W: Invalid Amino Acid Number in Coding Region, SEO ID:5
 L:173 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
 L:174 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:174 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
 L:175 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:175 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:176 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:177 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:177 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:4
L:177 M:252 E: No. of Seq. differs, <211> LENGTH:Input:291 Found:118 SEQ:5
L:210 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7, Line#:208
L:211 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:212 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:212 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:42 SEQ:7
L:212 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:15
L:212 M:112 C: (48) String data converted to lower case.
L:213 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:214 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:214 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:215 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
M:254 Repeated in SeqNo=7
L:215 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
M:112 Repeated in SegNo=7
L:216 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
L:217 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:217 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:218 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:218 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
L:219 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:219 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
M:341 Repeated in SeqNo=7
L:220 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:220 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:221 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:222 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:222 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4
L:223 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:223 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:224 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:225 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:226 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:226 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:227 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
```

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Input Set : A:\PTO.AMC.txt

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L:227 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:228 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:228 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
L:229 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
L:230 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:230 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:231 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:231 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
L:232 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:232 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
L:233 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
L:234 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:241 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:5
L:246 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
L:254 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:259 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
L:262 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:267 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:272 M:252 B: No. of Seq. differs, <211> LENGTH:Input:1122 Found:294 SEQ:7
L:339 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:337
L:341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:341 M:254 B: No. of Bases conflict, LENGTH:Input:1 Counted:42 SEO:9
L:341 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:341 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SeqNo=9
L:344 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
M:112 Repeated in SeqNo=9
M:341 Repeated in SeqNo=9
L:349 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:352 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:357 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
L:362 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:370 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:375 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:16
L:378 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:383 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:8
L:388 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:391 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:396 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:8
L:399 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1101 Found:294 SEQ:9
L:490 M:258 W: Mandatory Peature missing, <223> Blank for SEQ#:13, Line#:488
L:491 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:13
M:254 Repeated in SeqNo=13
L:496 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:341 Repeated in SeqNo=13
L:497 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:112 Repeated in SegNo=13
L:499 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:502 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
```

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

L:507 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:512 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:12
L:517 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:16
L:520 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
L:522 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:15
L:525 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:530 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:12
L:535 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:557 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1502 Found:528 SEQ:13
L:622 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:620
L:623 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:15
M:341 Repeated in SeqNo=15
M:341 Repeated in SeqNo=15

L:687 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1309 Found:470 SEQ:15